



AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLN. NO.: 09/850,007

ATTY DOCKET NO.: Q64408

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A method of recording/reproducing broadcasting signals, comprising:

establishing a size of recording files based on a broadcasting time of a program to be recorded and capacity of a storage device in which the recording files are included;

receiving signals of the program on a channel, and consecutively recording the signals into the recording files in order; and

controlling to continue the recording step until a recording stop instruction is received or broadcasting of the program is ended.

2. (previously presented): The method of claim 1 further comprising:
reproducing the recording files in order of recording, in response to a reproduction instruction.

3. (previously presented): The method of claim 1, wherein the recording comprises:
determining whether or not a volume of a part of the signals which have been recorded into a first recording file reaches the established size;
closing the first recording file and recording the remaining part of the signals to a second recording file when it is determined that the volume is equal to the size; and

repeating the determining and the closing/recording to obtain the recording files in which the signals are recorded in order.

4. (original): The method of claim 2, wherein the reproduction instruction is issued after at least one recording file is filled with a part of the signals.

5. (previously presented): The method of claim 2 further comprising:
deleting a recording file which has reproduced.

6. (previously presented): The method of claim 3 further comprising:
fast-forward reproducing recording files which complete the recording of the signals in order of recording, in response to a reproduction instruction; and
reproducing, in normal speed, recording files which complete the recording of the signals after the reproduction instruction.

7. (previously presented): The method of claim 3, wherein when a reproduction instruction is issued, the closing/recording is started.

8. (original): The method of claim 1, wherein each program is broadcast through digital signals and the digital signals are recorded into the corresponding recording file.

9. (previously presented): A recording/reproducing device of broadcasting signals comprising:

a receive unit which receives broadcasting signals of a program on a channel;
a storage device which stores recording files;
a recording/reproducing manage unit which manages production and reproduction of recording files; and
a data control unit which: supplies the received signals of program to the recording/reproducing manage unit to record the signals into the recording files each of which has a predetermined size in order until a recording stop instruction is received or broadcasting of the program is ended: supplies the recording files to the recording/reproducing manage unit to reproduce the recording files in response to a reproduction instruction; and is capable of supplying a first one of the recording files in parallel with recording a second one of the recording files, the first one having been recorded earlier than the second one.

10. (original): The recording/reproducing device of claim 9, wherein the reproduction instruction is issued after at least one recording file is filled with a part of the signals.

11. (original): The recording/reproducing device of claim 9, wherein the data control unit controls to delete a recording file which has reproduced.

12. (original): A recording/reproducing device of broadcasting signals comprising:
a storage device which includes recording files to record broadcasting signals of a program on a channel;

an establishing unit which establishes a size of the recording files based on a broadcasting time of the program to be recorded and capacity of the storage device;

a receive unit which receives signals of the program, and consecutively records the signals into the recording files in order; and

a recording control unit which controls the receive unit to repeat the reception and the recording until a recording stop instruction is received or broadcasting of the program is ended.

13. (original): The recording/reproducing device of claim 12 further comprising:

a reproducing control unit which reproduces the recording files in order of recording, in response to a reproduction instruction.

14. (original): The recording/reproducing device of claim 12, wherein the recording control unit determines whether or not a volume of a part of the signals which have been recorded into a first recording file reaches the established size, closes the first recording file and records the remaining part of the signals to a second recording file when it is determined that the volume is equal to the size, and repeats the determination operation and the closing/recording operations to obtain the recording files in which the signals are recorded in order.

15. (currently amended): A computer program product including computer-readable media with medium storing instructions to enable readable by a computer to perform for performing a method of recording/reproducing broadcasting signals, comprising:

establishing a size of recording files based on a broadcasting time of a program to be recorded and capacity of a storage device in which the recording files are included; receiving signals of the program on a channel, and consecutively recording the signals into the recording files in order; and controlling to continue the recording step until a recording stop instruction is received or broadcasting of the program is ended.

Claims 16-17 (canceled).

18. (previously presented): A method of recording/reproducing broadcasting signals, comprising:

establishing a size of recording files based on a broadcasting time of a program to be recorded and capacity of a storage device in which the recording files are included; receiving signals of the program on a channel, and consecutively recording the signals into the recording files in order; controlling to continue the recording step until a recording stop instruction is received or broadcasting of the program is ended; and reproducing the recording files in order of recording, in response to a reproduction instruction,

wherein the recording comprises:

determining whether or not a volume of a part of the signals which have been recorded into a first recording file reaches the established size;

closing the first recording file and recording the remaining part of the signals to a second recording file when it is determined that the volume is equal to the size; and repeating the determining and closing/recording to obtain the recording files in which the signals are recorded in order.

19. (original): A recording/reproducing device of broadcasting signals comprising:
 - a storage device which includes recording files to record broadcasting signals of a program on a channel;
 - an establishing unit which establishes a size of the recording files based on a broadcasting time of the program to be recorded and capacity of the storage device;
 - a receive unit which receives signals of the program, and consecutively records the signals into the recording files in order;
 - a recording control unit which controls the receive unit to repeat the reception and the recording until a recording stop instruction is received or broadcasting of the program is ended; and
 - a reproducing control unit which reproduces the recording files in order of recording, in response to a reproduction instruction, wherein the recording control unit determines whether or not a volume of a part of the signals which have been recorded into a first recording file reaches the established size, closes the first recording file and records the remaining part of the signals to a second recording file when it is determined that the volume is equal to the size, and repeats the determination

operation and the closing/recording operations to obtain the recording files in which the signals are recorded in order.

20. (previously presented): A method of recording/reproducing broadcasting signals, comprising:

receiving broadcasting signals of a program on a channel;
recording the signals into recording files, each of which has a predetermined size, in order until a recording stop instruction is received or broadcasting of the program is ended; and reproducing the recording files in response to a reproduction instruction;
wherein a first one of the recording files is reproduced in parallel with recording a second one of the recording files, receiving signals recorded in the first one being previous to receiving signals recorded in the second one.